

U.S. DEPARTMENT OF HOUSING AND URBAN DEVELOPMENT
Assistant Secretary for Housing-Federal Housing Commissioner

TO: DIRECTORS, HOUSING DIVISION
DIRECTORS, MULTIFAMILY DIVISION
DIRECTORS, SINGLE FAMILY DIVISION

Series and Series Number:

(Supersedes issue dated
July 19, 1993)

MATERIALS RELEASE NO. 1077d

ISSUE DATE: August 15, 1997

REVIEW DATE: August 15, 2000

SUBJECT: 1. Product

Sarnafil Roofing Systems

2. Name and Address
of Manufacturer

Sarnafil, Inc.
100 Dan Road
Canton Commerce Center
Canton, MA 02021

Data on the nonstandard product, described herein have been reviewed by the Department of Housing and Urban Development (HUD) and determination has been made that it is considered suitable from a technical standpoint for the use indicated herein. This Release does not purport to establish a comparative quality or value rating for this product as compared to standard products normally used in the same manner.

This Materials Release cannot be used as an indication of endorsement, or approval by HUD of the described product, and any statement or representation, however made, indicating such approval or endorsement by HUD is unauthorized. See Code 18, U.S.C. 709.

Any reproduction of this Release must be in its entirety.

USE: Roofs for low slopes and pitched roofs.

DESCRIPTION:

Sarnafil roofing systems consist of substrate preparation, attachment of insulation, when required, Sarnafil, Inc. membrane, complete flashing, and any other work as needed.

Sarnafil roofing systems are single-ply polyvinyl chloride (PVC) membrane systems laid over any type deck and/or insulation which is acceptable to both Sarnafil, Inc. (Sarnafil) and the HUD Minimum Property Standards for Housing (MPS). Sarnafil roofing membranes are available in four basic systems: Fully Adhered, Loose-Laid and Ballasted, Mechanically Attached, and Insulated Roof Membrane Assembly (IRMA).

Sarnafil Roofing Membranes

1. Fully Adhered System

G-410 Gray. Fiberglass reinforced 1.2mm (.048") light gray PVC roofing sheet for adhesion to all approved substrates; concrete and C-D exterior grades of plywood.

2. Loose-Laid System

G-442 Gray. Fiberglass reinforced 1.2mm (.048") medium gray PVC roofing membrane for loosely-laid membranes under ballast, for use directly over all approved substrates except poured, precast concrete and preformed cementitious/wood fiber roof decks. These surfaces require an approved nonasphaltic felt leveling layer under the Sarnafil.

3. Mechanically Fastened System

S-327 Gray. Polyester reinforced 1.2mm (.048") light gray PVC membrane for use when both roof membrane and insulation are mechanically affixed to the structural roof deck. It can be used directly over any approved substrate except poured, precast concrete and preformed cementitious/wood fiber roof decks. These surfaces require a nonasphaltic felt leveling layer under the membrane.

4. Inverted Membrane System

- a. G476-12 Black/Orange. Fiberglass reinforced 1.2mm (.048") black PVC membrane for "upside-down" roofs. When used directly over poured and precast concrete roof decks, an approved nonasphaltic felt leveling layer must be applied under the membrane. Other approved substrates are acceptable.
- b. G476-15 Black/Orange. Fiberglass reinforced 1.5mm (.060") black PVC membrane for use over an approved substrate without a leveling layer.
- c. G476-20 Black/Orange. Fiberglass reinforced 2.0mm (.079") black PVC membrane for use over an approved substrate without a leveling layer.

MATERIALS:

All elements of the Sarnafil roofing systems shall be products of Sarnafil, Inc. with the Sarnafil Trademark. Materials used in conjunction with the systems which are not products of Sarnafil, Inc. shall be approved, in writing, by Sarnafil, Inc.

Physical properties of the Sarnafil membranes (tensile strength, elongation, creep, brittleness, etc.) are on file at HUD Headquarters and Sarnafil Headquarters. Direct questions to James G. Rubenacker; Director of Technical Services: 1-800-451-2504 or (617) 829-5400.

WIND AND FIRE CLASSIFICATIONS:

Adhered roofing systems shall be designed to resist wind uplift forces as determined in the Wind Design Guide for Adhered Single-Ply Roofing Systems, published by the Single-Ply Roofing Institute (SPRI).

Mechanically fastened roofing systems shall be designed to resist wind uplift forces as determined in the Wind Design Guide for Mechanically Fastened Single-Ply Roofing Systems, published by SPRI.

Ballasted roofing systems shall be designed in accordance with the Wind Design Guide for Ballasted Single-Ply Roofing Systems, published by SPRI.

Fire Classification shall be in accordance with Underwriters Laboratories, Inc. (UL), or Factory Mutual Engineering Corporation (FM) Construction. To qualify for fire rating and wind uplift, the system shall be in the current UL or FM Listings. Roofing systems qualified for Fire Classification with Coatings shall be inspected every year to assure the condition of the coating is satisfactory, and shall be recoated every five years.

INSTALLATION:

1. General

The Sarnafil roofing systems shall be installed by roofing contractors approved or licensed by Sarnafil, Inc., and installation shall be in accordance with proper Sarnafil Roofing Systems Specifications and Details.

2. Substrate Preparation

Preparation of the substrate shall comply with the latest edition of Sarnafil Roofing Systems Specifications and Details. Design of the roof deck is the responsibility of the owner or his architect/engineer.

3. Insulation

Insulation or underlayment shall be approved, in writing, by Sarnafil as to thickness and type. Insulation shall be installed in accordance with insulation manufacturer's recommendations, and Sarnafil Roofing Systems Specifications and Details.

4. Membrane Installation

Membrane installation, including placing, bond lap splicing, perimeter attachments, flashing, construction closure, walkways and other work to provide watertight roofing systems, shall comply with appropriate Sarnafil Roofing Systems Specifications and Details.

INSPECTION:

A designated representative of Sarnafil shall make inspections of the installation at the following intervals:

- (1) prior to delivery of materials - to accept or reject the roof deck to which the roofing system is to be applied;
- (2) during the installation - to inspect and approve the installation methods and techniques; and (3) upon completion - to give final approval to the installation.

WARRANTY:

A ten-year warranty shall be given to the owner by Sarnafil to read as follows:

Sarnafil, Inc. (Sarnafil) hereby warrants to the owner of its roofing system, installed by an applicator approved by Sarnafil, Inc. that the system will remain in a water-tight condition for a period of ten years from the date of installation. In the event of failure of the aforesaid system to function as warranted above, whether on account of defective materials, faulty installation, or on account of normal processes of weather and aging, Sarnafil, Inc. will make, or cause to be made, such repairs and maintenance necessary to enable the system to perform as warranted above. Sarnafil's liability will be limited to the original cost of the roofing system.

Sarnafil's obligations to repair or maintain the system under this warranty shall not be in force or effect unless: (1) Sarnafil is notified of any failure of the system covered by the warranty within thirty (30) days following such failure; (2) the system is installed by an applicator approved by Sarnafil; and, (3) no alterations or repairs to the system are made without the prior written approval of Sarnafil, as to the extent, methods and materials used.

Sarnafil assumes no liability for any failure of the system resulting from winds, which exceed the design wind, Acts of God, including without limitation, lightning or earthquake; nor for any failure of the product caused by structural defects of the building on which the system is applied; nor from deliberate misuse of the product caused by structural defects of the building on which the system is applied; nor from deliberate misuse of the product; nor for any failure of the system caused by leakage or any other cause from an adjacent structure, or application to the roof by any other trades.

MANUFACTURER'S RESPONSIBILITIES:

Issuance of this Materials Release (MR) commits the manufacturer to fulfill, as a minimum, the following:

1. Produce, label and certify the material, product or system in strict accordance with the terms of this MR.
2. Provide necessary corrective action in a timely manner for all cases of justified complaint, poor performance, or failure reported by HUD.
3. When requested, provide the Office of Consumer and Regulatory Affairs, HUD Headquarters, with a representative list of properties, in which the material, product or system has been used, including complete addresses or descriptions of locations and dates of installation.
4. Inform HUD, in advance, of changes in production facilities, methods, design of the product, company name, ownership or mailing address.

EVALUATION:

This MR shall be valid for a period of three years from the date of initial issuance or most recent renewal or revision, whichever is later. The holder of this MR shall apply for a

renewal or revision 90 days prior to the Review Date printed on this MR. Submittals for renewal or revision shall be sent to HUD Headquarters. Appropriate User Fee shall be sent to:

U.S. Department of Housing and Urban Development
Technical Suitability of Products Fees
P.O. Box 954199
St. Louis, MO 63195-4199

The holder of this MR may apply for revision at any time prior to the Review Date. Minor revisions may be in the form of a supplement to the MR.

If the Department determines that a proposed renewal or supplement constitutes a revision, the appropriate User Fee for a revision will need to be submitted in accordance with Code of Federal Regulations 24 CFR 200.934, "User Fee System for the Technical Suitability of Products Program," and current User Fee Schedule.

CANCELLATION:

Failure to apply for a renewal or revision shall constitute a basis for cancellation of this MR. HUD will notify the manufacturer that the MR may be canceled when:

1. conditions under which the document was issued have changed so as to affect production of, or to compromise the integrity of the accepted material, product, or system,
2. the manufacturer has changed its organizational form without notifying HUD, or
3. the manufacturer has not complied with responsibilities it assumed as a condition of HUD's acceptance.

However, before cancellation, HUD will give the manufacturer a written notice of the specific reasons for cancellation, and the opportunity to present views on why the MR should not be canceled. No refund of fees will be made on a canceled document.

This Materials Release is issued solely for the captioned firm,
and is not transferable to any person or successor entity.
